

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PROJECT MAC

Artificial Intelligence.

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Hardware Memo. #117.

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INPUT MULTIPLEXER STATUS

17 October 1966

Note: Computer control of Input Multiplexer and Output Sample and Hold is available when clock and test switches on the I/O box are in "Computer Input" and "Computer Output" positions, respectively. Manual operation of the Input Multiplexer and Output Sample and Hold is available when the same switches are in "Clock Mode" and "Test Mode" respectively. In "Test Mode," output commands are derived from input channels 154 through 177 as noted in the current INPUT MULTIPLEXER STATUS. These channels are potentiometer readings from either Joy Stick Console where Pot No. 1 is at the top and No. 10 is consecutively at bottom.

See OUTPUT SAMPLE AND HOLD for Output Channel numbers.

Noftsker

INPUT MULTIPLIER STATUS

17 October 1966

Channel No.	Function
000	Output Sample and Hold No. 77A, AMF Swing
001	Output Sample and Hold No. 76A, AMF Vertical
002	Output Sample and Hold No. 75A, AMF Horizontal
003	Output Sample and Hold No. 74A, Time Domain Reflectometer
004	Output Sample and Hold No. 73A, AMF Wrist Tow
5	Output Sample and Hold No. 72A, AMF Wrist Roll
6	Output Sample and Hold No. 71A, Alles Hand Rotate
7	Output Sample and Hold No. 70A, Alles Hand Extend
010	Not Used
---	Not Used
042	Pot Box
043	Pot Box
044	Pot Box
045	Pot Box
046	Minsky/Bennett Shoulder
047	Minsky/Bennett Shoulder Joint
050	Minsky/Bennett Arm Joint 1A
051	Minsky/Bennett Arm Joint 1B
052	Minsky/Bennett Arm Joint 2A
053	Minsky/Bennett Arm Joint 2B
054	Minsky/Bennett Arm Joint 3A
055	Minsky/Bennett Arm Joint 3B
056	Minsky/Bennett Arm Joint 4A
057	Minsky/Bennett Arm Joint 4B

INPUT MULTIPLEXER STATUS (continued, page 2)

Channel No.	Function
060	Time Domain Reflectometer Vertical
061	Alles Hand Tilt
062	Alles Hand Extend
063	Alles Hand Rotate
064	Alles Hand Grasp
065	AMF Wrist Roll
066	AMF Wrist Yaw
067	AMF Horizontal High Resolution
070	AMF Horizontal High Resolution
071	AMF Horizontal Absolute Position (Servoed)
72	AMF Swing High Resolution (Servoed)
73	AMF Swing High Resolution (Servoed)
74	AMF Swing Absolute Position
75	AMF Vertical High Resolution
76	AMF Vertical High Resolution
77	AMF Vertical Absolute Position (Servoed)

INPUT MULTIFLEXER STATUS (continued, page 3)

Channel No.	Function	
100	Output Sample and Hold No. 56A	Minsky/Bennett Arm 1A
101	Output Sample and Hold No. 57A	Minsky/Bennett Arm 1B
102	Output Sample and Hold No. 60A	Minsky/Bennett Arm 2A
103	Output Sample and Hold No. 61A	Minsky/Bennett Arm 2B
104	Output Sample and Hold No. 62A	Minsky/Bennett Arm 3A
105	Output Sample and Hold No. 63A	Minsky/Bennett Arm 3B
106	Output Sample and Hold No. 64A	Minsky/Bennett Arm 4A
107	Output Sample and Hold No. 65A	Minsky/Bennett Arm 4B
108	Not Used	
---	Not Used	
150	Output D to A Converter 744A	
151	Output D to A Converter 744B	
152	Output Sample and Hold No. 67A	Allee Hand Tilt
153	Output Sample and Hold No. 66A,	Allee Hand Grasp
154	Joy Stick Console Pot No. 1	Minsky/Bennett Arm 5
155	Joy Stick Console Pot No. 2	Minsky/Bennett Arm 5
156	Joy Stick Console Pot No. 3	Minsky/Bennett Arm 1A
157	Joy Stick Console Pot No. 4	Minsky/Bennett Arm 1B
160	Joy Stick Console Pot No. 5	Minsky/Bennett Arm 2A
161	Joy Stick Console Pot No. 6	Minsky/Bennett Arm 2B
162	Joy Stick Console Pot No. 7	Minsky/Bennett Arm 3A
163	Joy Stick Console Pot No. 8	Minsky/Bennett Arm 3B
164	Joy Stick Console Pot No. 9	Minsky/Bennett Arm 4A
165	Joy Stick Console Pot No. 10	Minsky/Bennett Arm 4B

INPUT MULTIPLIER STATUS (continued, page 4)

Channel No.	Function
166	Joy Stick Console Pot No. 10
167	Joy Stick Console Pot No. 9
170	Joy Stick Console Pot No. 8
171	Joy Stick Console Pot No. 7
172	Joy Stick Console Pot No. 6
173	Joy Stick Console Pot No. 5
174	Joy Stick Console Pot No. 4
175	Joy Stick Console Pot No. 3
176	Joy Stick Console Pot No. 2
177	Joy Stick Console Pot No. 1

Alles Hand Grasp
 Alles Hand Tilt
 Alles Hand Extend
 Alles Hand Rotate
 AMP Wrist Roll
 AMP Wrist Yaw
 TDR Horizontal
 AMP Horizontal
 AMP Vertical
 AMP Swing

OUTPUT SAMPLE AND HOLD STATUS

17 October 1966

Channel No.	Function	Control	Function
Bits 0--5	Bits 6--17	Bits 18--23	Bits 24--35

00	Vidiasector "Y" Deflection	70 reset Integrator	"Y" Deflection
54	Minsky/Dennett	Shoulder Position	N. C.
55	Minsky/Dennett	Shoulder Position	N. C.
56	Minsky/Dennett	Arm 1A	N. C.
57	Minsky/Dennett	Arm 1B	N. C.
60	Minsky/Dennett	Arm 2A	N. C.
61	Minsky/Dennett	Arm 2B	N. C.
62	Minsky/Dennett	Arm 3A	N. C.
63	Minsky/Dennett	Arm 3B	N. C.
64	Minsky/Dennett	Arm 4A	N. C.
65	Minsky/Dennett	Arm 4B	N. C.
66	Alles Hand Grasp	Speed *	N. C.
67	Alles Hand Tilt	Speed *	N. C.
70	Alles Hand Extend	Speed *	N. C.
71	Alles Hand Rotate	Speed *	N. C.
72	AMP Wrist Roll	N. C.	N. C.
73	AMP Wrist Yaw	N. C.	N. C.
74	Time Domain Reflectometer	*	*
75	AMP Arm Horizontal	N. C.	N. C.
76	AMP Arm Vertical	*	*
77	AMP Arm Swing	N. C.	N. C.

* Indicates a function which may be manually specified or program controlled. Output channels 54--77 may be manually controlled from the Joy Stick Console as per current Input Multiplexer Status.

Moftaker